

# Chapter 1

## Towards a Technology-Enhanced University Education

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### ABSTRACT

*Although Canadian universities have distinct cultures, research strengths, and teaching philosophies, many also share similar values and goals that respond to an increasingly multicultural, diverse, and technologically advanced society. The aim of this chapter is to demonstrate how learning technologies used in a blended learning environment can help to meet the goals of a contemporary university education. An understanding of blended learning as an effective model for meeting goals not only at the course and program levels, but also at the institutional level, is essential for the widespread, mainstream implementation of this model so that it becomes a part of regular practice by faculty from a variety of disciplines and learning contexts.*

### INTRODUCTION

This chapter will focus on the potential that educational technologies have to support the common goals of a university-level education, specifically in blended learning contexts. Although there is an increasing number of students who take fully online distance courses and programs (Moller et al., 2008), many undergraduate and graduate students still commute to campus and expect flexible, innovative, and engaging learning experiences with

technologies that they commonly use or will be expected to use in today's professional, academic, and social environments.

Since definitions of blended learning or hybrid learning abound, it is important to provide as many concrete examples as possible in order to encourage faculty across disciplines to consider the pedagogical merits of this approach and to demonstrate to administrators the relevance of this model in meeting overall institutional goals. A better understanding of blended learning within the context of strategic university goals is impor-

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tant in order to “embed” (Jasinski, 2007) the use of educational technologies at the institutional level and to reinforce the integrated nature of teaching, learning, and technology beyond the distance education context. Much of the literature on blended learning focuses on the integration of digital technologies in face-to-face (F2F) courses for the purposes of meeting learning outcomes at the individual course or program level (Garnham & Kaleta, 2002; Garrison & Vaughn, 2008; Twigg, 2003). Discussions at these levels are an important first step in the effective implementation of educational technologies for blended/hybrid learning; however, understanding how blended learning can support *institutional* goals and values can motivate faculty to use technology as a regular part of their practice and can better involve administrators in making key decisions around educational technology.

The use and management of learning technologies have often been associated with distance education programs and with faculty/students who are “digital natives” participating in virtual environments. In blended learning, the web-based technologies are transferred to the F2F classroom to enhance interaction and student-centered activities (web-enhanced classrooms) or to enhance online education through classroom contact (classroom-enhanced online education) (Dziuban et al., 2004). However, for the purposes of this chapter, blended learning can also refer to both software and hardware or installed devices in physical learning spaces (i.e., DVD players, document cameras, whiteboard capture systems, videoconferencing, web cameras) and mobile devices (cell phones, clickers, PDAs, laptops or Tablet PCs, iPods, iPads, digital cameras, USB drives, and GPS systems) to enhance interaction, flexibility, and to increase student engagement (Milne, 2006). Providing examples of educational technology use beyond the context of web-based distance/online education is an important step towards better understanding and implementing blended learning models across disciplines.

First, this chapter will provide a brief discussion of the rationale behind the goals that are commonly stated in university strategic plans, vision, or mission documents by referring to George Kuh’s (2005) work on student engagement and success. Next, blended learning will be promoted as an effective model for engaging instructors and learners with the principles and practices that lead to student success. The bulk of this chapter will focus on examples of blended learning within the context of common university goals that aim to engage students, improve communication skills, support diversity, interdisciplinarity, and inquiry. Finally, challenges to the implementation and embedding of blended learning approaches into regular practice will be discussed, and future research directions to address those challenges will be recommended.

## **BACKGROUND**

Despite unique university cultures, there appears to be common principles and goals shared by many Canadian universities: student engagement, the development of communication, language, and critical thinking skills, internationalization and global citizenship, respect for diversity, interdisciplinary courses and programs, community-based initiatives, and support for undergraduate research. According to Kuh et al. (2005, p. xiii), these goals and values are considered essential for student success and economic independence in an information-driven global economy. Many traditionally underserved students have come to this realization, and the mass democratization of education has created the challenging task of providing high quality post-secondary education to as many as three-quarters of the adult population (Kuh et al., 2005). To demonstrate public accountability, many universities now publish strategic plans or mission documents that include educational goals, policies, and practices that lead to student success (Kuh et al., 2005). Though teaching on

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